

#### STATE OF MARYLAND

# **DHMH**

## Maryland Department of Health and Mental Hygiene

201 W. Preston Street • Baltimore, Maryland 21201

Martin O'Malley, Governor - Anthony G. Brown, Lt. Governor - Joshua M. Sharfstein, M.D., Secretary

## February 21, 2014

## Public Health & Emergency Preparedness Bulletin: # 2014:07 Reporting for the week ending 02/15/14 (MMWR Week #07)

#### **CURRENT HOMELAND SECURITY THREAT LEVELS**

National: No Active Alerts

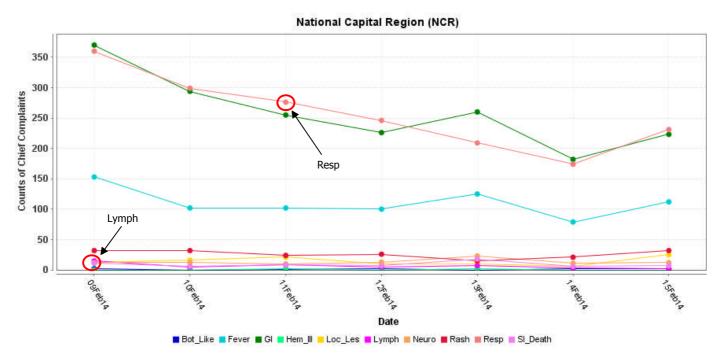
Maryland: Level Four (MEMA status)

#### SYNDROMIC SURVEILLANCE REPORTS

#### ESSENCE (Electronic Surveillance System for the Early Notification of Community-based Epidemics):

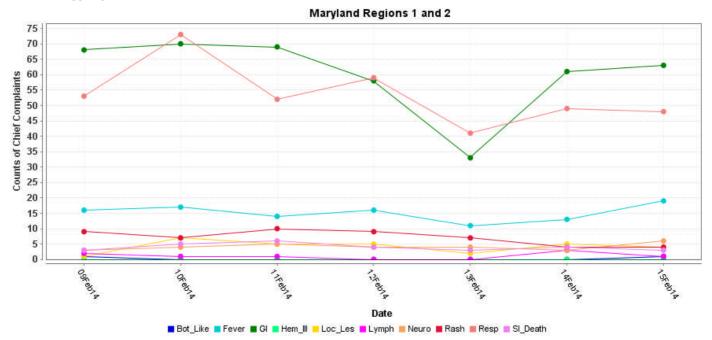
Graphical representation is provided for all syndromes, excluding the "Other" category, all age groups, and red alerts are circled. Red alerts are generated when observed count for a syndrome exceeds the 99% confidence interval. Note: ESSENCE – ANCR uses syndrome categories consistent with CDC definitions.

Overall, no suspicious patterns of illness were identified. Track backs to the health care facilities yielded no suspicious patterns of illness.

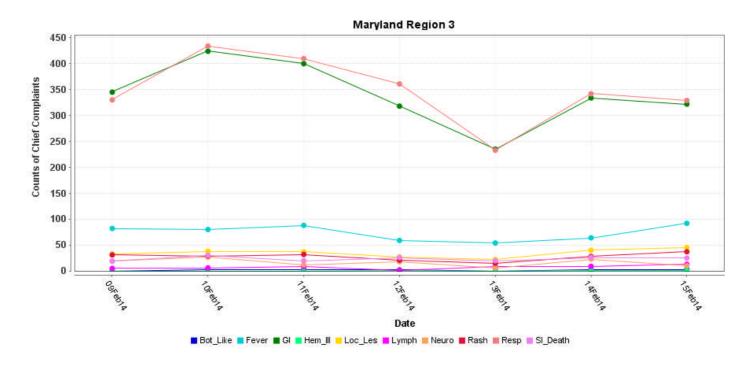


<sup>\*</sup>Includes EDs in all jurisdictions in the NCR (MD, VA, and DC) reporting to ESSENCE

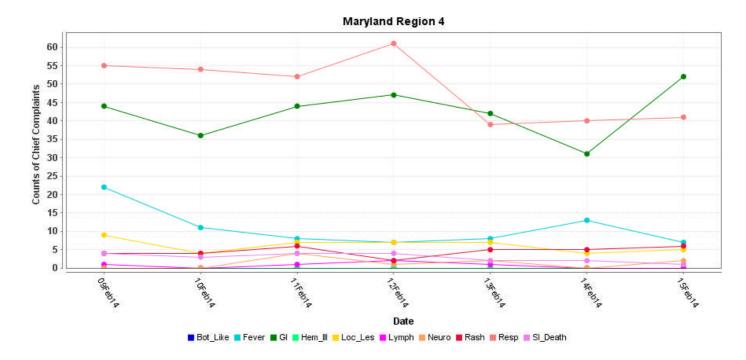
#### **MARYLAND ESSENCE:**



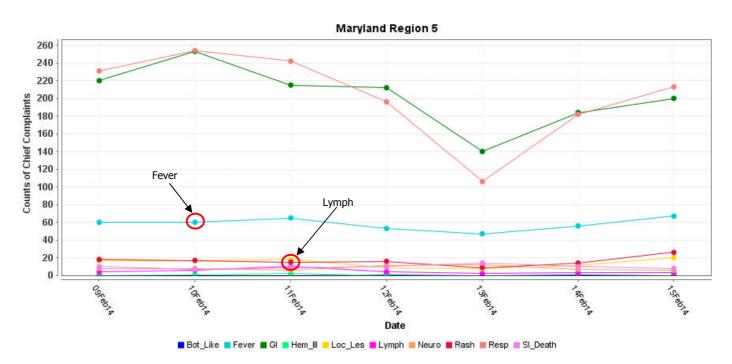
<sup>\*</sup> Region 1 and 2 includes EDs in Allegany, Frederick, Garrett, and Washington counties reporting to ESSENCE



<sup>\*</sup> Region 3 includes EDs in Anne Arundel, Baltimore City, Baltimore, Carroll, Harford, and Howard counties reporting to ESSENCE



<sup>\*</sup> Region 4 includes EDs in Cecil, Dorchester, Kent, Somerset, Talbot, Wicomico, and Worcester counties reporting to ESSENCE

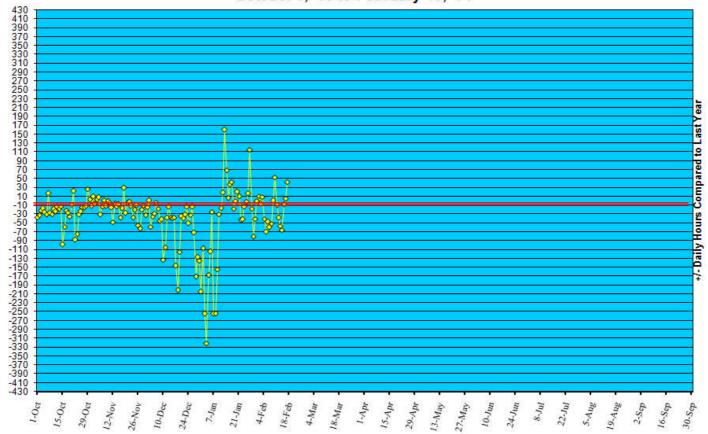


<sup>\*</sup> Region 5 includes EDs in Calvert, Charles, Montgomery, Prince George's, and St. Mary's counties reporting to ESSENCE

#### **REVIEW OF EMERGENCY DEPARTMENT UTILIZATION**

**YELLOW ALERT TIMES (ED DIVERSION):** The reporting period begins 10/01/13.

# Statewide Yellow Alert Comparison Daily Historical Deviations October 1, '13 to February 15, '14



#### **REVIEW OF MORTALITY REPORTS**

Office of the Chief Medical Examiner: OCME reports no suspicious deaths related to an emerging public health threat for the week.

#### MARYLAND TOXIDROMIC SURVEILLANCE

**Poison Control Surveillance Monthly Update:** Investigations of the outliers and alerts observed by the Maryland Poison Center and National Capital Poison Center in January 2014 did not identify any cases of possible public health threats.

#### **REVIEW OF MARYLAND DISEASE SURVEILLANCE FINDINGS**

#### COMMUNICABLE DISEASE SURVEILLANCE CASE REPORTS (confirmed, probable and suspect):

Meningitis:	<u>Aseptic</u>	<u>Meningococcal</u>
New cases (February 9 - February 15, 2014):	6	0
Prior week (February 2 - February 8, 2014):	5	0
Week#07, 2013 (February 10 - February 16, 2014):	4	0

#### 7 outbreaks were reported to DHMH during MMWR Week 07 (February 9-15, 2014)

#### 4 Gastroenteritis Outbreaks

- 1 outbreak of GASTROENTERITIS in a Nursing Home
- 2 outbreaks of GASTROENTERITIS in Assisted Living Facilities
- 1 outbreak of GASTROENTERITIS associated with a School

#### 1 Respiratory Illness Outbreak

1 outbreak of INFLUENZA in a Nursing Home

#### 1 Rash Illness Outbreak

1 outbreak of SCABIES in an Institution

#### 1 Other Outbreak

1 outbreak of SURGICAL SITE INFECTIONS associated with a Hospital

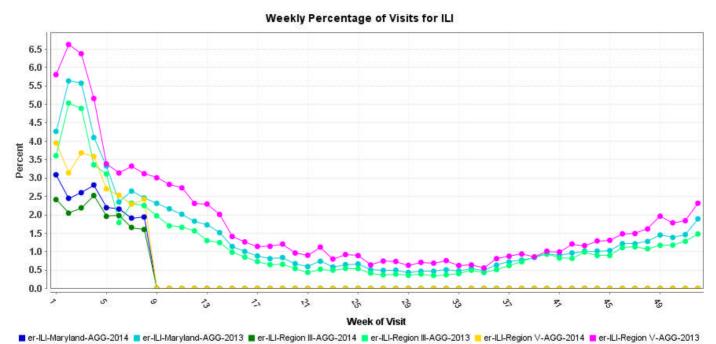
#### MARYLAND SEASONAL FLU STATUS

Seasonal Influenza reporting occurs October through May. Seasonal influenza activity for Week 7 was: Widespread with Moderate Intensity.

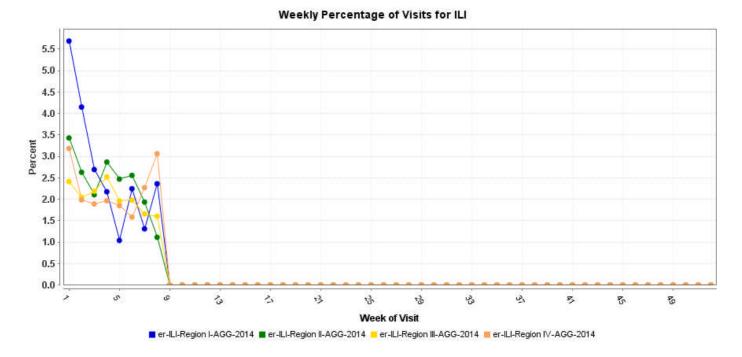
#### SYNDROMIC SURVEILLANCE FOR INFLUENZA-LIKE ILLNESS

Graphs show the percentage of total weekly Emergency Department patient chief complaints that have one or more ICD9 codes representing provider diagnoses of influenza-like illness. These graphs do not represent confirmed influenza.

Graphs show proportion of total weekly cases seen in a particular syndrome/subsyndrome over the total number of cases seen. Weeks run Sunday through Saturday and the last week shown may be artificially high or low depending on how much data is available for the week.



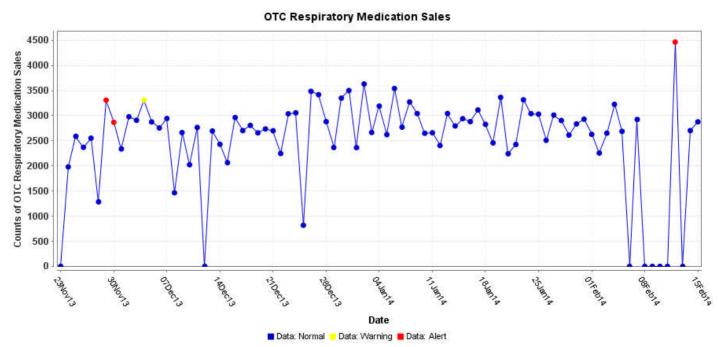
\* Includes 2013 and 2014 Maryland ED visits for ILI in Metro Baltimore (Region 3), Maryland NCR (Region 5), and Maryland Total



\*Includes 2014 Maryland ED visits for ILI in Region 1, 2, 3, 4, and 5

#### OVER-THE-COUNTER (OTC) SALES FOR RESPIRATORY MEDICATIONS:

Graph shows the daily number of over-the-counter respiratory medication sales in Maryland at a large pharmacy chain.



#### PANDEMIC INFLUENZA UPDATE / AVIAN INFLUENZA-RELATED REPORTS

**WHO update:** The current WHO phase of pandemic alert for avian influenza is ALERT. Currently, the avian influenza H5N1 virus continues to circulate in poultry in some countries, especially in Asia and northeast Africa. This virus continues to cause sporadic human infections with some instances of limited human-to-human transmission among very close contacts. There has been no sustained human-to-human or community-level transmission identified thus far.

Influenza A (H7N9) is one of a subgroup of influenza viruses that normally circulate among birds. Until recently, this virus had not been seen in people. However, human infections have now been detected. As yet, there is limited information about the scope of the disease the virus causes and about the source of exposure. The disease is of concern because most patients have been severely ill. There is no indication thus far that it can be transmitted between people, but both animal-to-human and human-to-human routes of transmission are being actively investigated.

**Alert phase**: This is the phase when influenza caused by a new subtype has been identified in humans. Increased vigilance and careful risk assessment, at local, national and global levels, are characteristic of this phase. If the risk assessments indicate that the new virus is not developing into a pandemic strain, a de-escalation of activities towards those in the interpandemic phase may occur. As of January 24, 2013, the WHO-confirmed global total of human cases of H5N1 avian influenza virus infection stands at 650, of which 386 have been fatal. Thus, the case fatality rate for human H5N1 is approximately 59%.

**AVIAN INFLUENZA, HUMAN (H10N08):** Health authorities in east China's Jiangxi province confirmed on Thursday [13 Feb 2014] another human case of H10N8, a new strain of [avian influenza virus.] The patient, a 75-year-old man in Nanchang, capital of Jiangxi, developed symptoms and was admitted to hospital on 4 Feb 2014. The patient died on 8 Feb 2014, the provincial health and family planning department announced. Health experts called on the public to stay away from live poultry and to have good hygiene habits. On 17 Dec 2013, local health authorities in Jiangxi confirmed the 1st human infection of H10N8, when a 73-year-old woman died from the virus. Health experts then said H10N8 was known among birds, but human infection had never been reported before.

**AVIAN INFLUENZA (H7N9):** The major city of Guangzhou in southern China closes its live poultry markets on Saturday [16 Feb 2014] for 2 weeks to halt the spread of the H7N9 strain of bird flu. The closure lasts through 28 Feb 2014 "to strengthen work to control the spread of the H7N9 flu," the city government said in a one-sentence announcement on its microblog account. Guangzhou is the capital of Guangdong province, one of the hardest-hit areas in China's latest bird flu outbreak. Some 65 cases and 13 deaths have been reported by the provincial health bureau. The latest was a 78-year-old man who died 14 Feb 2014 in Guangzhou. The virus is hard to catch and most cases have been linked to contact with poultry. Nationwide, there have been at least 32 deaths, according to the official Xinhua News Agency. The health ministry said 127 cases were reported nationwide in January [2014]. One market in Guangzhou, Jiangcun, is one of China's busiest, with more than 60 000 birds per day sold there last year [2013], according to Xinhua. The market closures add to disease-control measures that have included the mass slaughter of chickens and other poultry on the Chinese mainland and in Hong Kong. Shanghai in China's east imposed a 3-month moratorium on live poultry sales in January [2014]. Zhejiang province south of Shanghai has suspended poultry trading. Also in January, Hong Kong suspended sales of live poultry and imports from the mainland. The World Health Organization says there is no evidence of sustained human-to-human transmission but has recommended close monitoring due to the unpredictable behavior of flu viruses.

#### **NATIONAL DISEASE REPORTS\***

There were no national disease reports for MMWR Week 7.

#### **INTERNATIONAL DISEASE REPORTS\***

**HANTAVIRUS (PANAMA):** 13 February 2014, Health authorities confirmed last Wednesday [12 Feb 2014] that a young 29-year-old woman who was hospitalized in Herrera province and later taken to Panama city for specialized medical attention, is infected with hantavirus but also has dengue. The woman was 7 months pregnant and because of these infections lost her baby, but is currently in stable condition. It is worth noting that to date there are 9 reported cases of hantavirus [pulmonary syndrome/HPS] in the Azuero region. (Emerging Infectious Diseases are listed in Category C on the CDC List of Critical Biological Agents) \*Non-suspect case

**LEPTOSPIROSIS ENGLAND):** 9 February 2014, It is thought [a 7-year-old boy] may have ingested floodwater containing rats' urine. If the theory is confirmed, it will make him the 1st person to die as a result of the flooding causing chaos across the UK. The boy was found at his home in the Chertsey area of Surrey, which became flooded when the River Thames burst its banks. He was taken to hospital with his father and mother but lost his fight for life yesterday [8 Feb 2014]. Speculation that he died from Weil's disease [a severe form of leptospirosis], which is transmitted from animals to humans through water, rose after the authorities failed to deny it was the cause. [The boy's] father was in a serious condition in hospital last night [8 Feb 2014], according to Surrey police. 15 others, including police officers, were also admitted as a precaution. Residents spoke of the "sense of shock" in the community at the boy's death. Chris Norman, Surrey county councilor for the Chertsey area, said: "It is a huge blow, especially with the floods as rampant as they are in the area. Carbon monoxide poisoning has also been put forward as another possible cause of the death. The gas may have been emitted by floodwater pumps used in the family home, police said. Last week, [the boy's] mother posted a photo of rising flood waters on Twitter. She wrote: "So I've been told to expect the Thames floods to rise another 6 inches [15.2 cm] over next 24 hours. This is outside my front door!" (Water Safety Threats are listed in Category B on the CDC List of Critical Biological Agents) \*Non-suspect case

National and International Disease Reports are retrieved from http://www.promedmail.org/.

#### **OTHER RESOURCES AND ARTICLES OF INTEREST**

More information concerning Public Health and Emergency Preparedness can be found at the Office of Preparedness and Response website: http://preparedness.dhmh.maryland.gov/ or follow us on Facebook at www.facebook.com/MarylandOPR.

NOTE: This weekly review is a compilation of data from various surveillance systems, interpreted with a focus on a potential BT event. It is not meant to be inclusive of all epidemiology data available, nor is it meant to imply that every activity reported is a definitive BT event. International reports of outbreaks due to organisms on the CDC Critical Biological Agent list will also be reported. While not "secure", please handle this information in a professional manner. Please feel free to distribute within your organization, as you feel appropriate, to other professional staff involved in emergency preparedness and infection control.

For questions about the content of this review or if you have received this and do not wish to receive these weekly notices, please e-mail us. If you have information that is pertinent to this notification process, please send it to us to be included in the routine report.

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### Syndrome Definitions for Diseases Associated with Critical Bioterrorism-associated Agents

Table: Text-based Syndrome Case Definitions and Associated Category A Conditions

Syndrome	Definition	Category A Condition
Botulism-like	ACUTE condition that may represent exposure to botulinum toxin ACUTE paralytic conditions consistent with botulism: cranial nerve VI (lateral rectus) palsy, ptosis, dilated pupils, decreased gag reflex, media rectus palsy. ACUTE descending motor paralysis (including muscles of respiration) ACUTE symptoms consistent with botulism: diplopia, dry mouth, dysphagia, difficulty focusing to a near point.	Botulism
Hemorrhagic Illness	SPECIFIC diagnosis of any virus that causes viral hemorrhagic fever (VHF): yellow fever, dengue, Rift Valley fever, Crimean-Congo HF, Kyasanur Forest disease, Omsk HF, Hantaan, Junin, Machupo, Lassa, Marburg, Ebola ACUTE condition with multiple organ involvement that may be consistent with exposure to any virus that causes VHF	VHF
	ACUTE blood abnormalities consistent with VHF: leukopenia, neutropenia, thrombocytopenia, decreased clotting factors, albuminuria	
Lymphadenitis	ACUTE regional lymph node swelling and/ or infection (painful bubo- particularly in groin, axilla or neck)	Plague (Bubonic)
Localized Cutaneous Lesion	SPECIFIC diagnosis of localized cutaneous lesion/ ulcer consistent with cutaneous anthrax or tularemia ACUTE localized edema and/ or cutaneous lesion/ vesicle, ulcer, eschar that may be consistent with cutaneous anthrax or tularemia INCLUDES insect bites	Anthrax (cutaneous) Tularemia
	EXCLUDES any lesion disseminated over the body or generalized rash EXCLUDES diabetic ulcer and ulcer associated with peripheral vascular disease	
Gastrointestinal	ACUTE infection of the upper and/ or lower gastrointestinal (GI) tract SPECIFIC diagnosis of acute GI distress such as Salmonella gastroenteritis ACUTE non-specific symptoms of GI distress such as nausea, vomiting, or diarrhea EXCLUDES any chronic conditions such as inflammatory bowel syndrome	Anthrax (gastrointesti nal)

DEPARTMENT OF HEALTH AND HUMAN SERVICES
CENTERS FOR DISEASE CONTROL AND PREVENTION

Syndrome Definitions for Diseases Associated with Critical Bioterrorism-associated Agents (continued from previous page)

Syndrome	Definition	Category A Condition
Respiratory	ACUTE infection of the upper and/ or lower respiratory tract (from the oropharynx to the lungs, includes otitis media)  SPECIFIC diagnosis of acute respiratory tract infection (RTI) such as pneumonia due to parainfluenza virus  ACUTE non-specific diagnosis of RTI such as sinusitis, pharyngitis, laryngitis  ACUTE non-specific symptoms of RTI such as cough, stridor, shortness of breath, throat pain  EXCLUDES chronic conditions such as chronic bronchitis, asthma without acute exacerbation, chronic sinusitis, allergic conditions (Note: INCLUDE acute exacerbation of chronic illnesses.)	Anthrax (inhalational) Tularemia Plague (pneumonic)
Neurological	ACUTE neurological infection of the central nervous system (CNS)  SPECIFIC diagnosis of acute CNS infection such as pneumococcal meningitis, viral encephalitis  ACUTE non-specific diagnosis of CNS infection such as meningitis not otherwise specified (NOS), encephalitis NOS, encephalopathy NOS  ACUTE non-specific symptoms of CNS infection such as meningismus, delerium  EXCLUDES any chronic, hereditary or degenerative conditions of the CNS such as obstructive hydrocephalus, Parkinson's, Alzheimer's	Not applicable
Rash	ACUTE condition that may present as consistent with smallpox (macules, papules, vesicles predominantly of face/arms/legs)  SPECIFIC diagnosis of acute rash such as chicken pox in person > XX years of age (base age cut-off on data interpretation) or smallpox  ACUTE non-specific diagnosis of rash compatible with infectious disease, such as viral exanthem EXCLUDES allergic or inflammatory skin conditions such as contact or seborrheaic dermatitis, rosacea EXCLUDES rash NOS, rash due to poison ivy, sunburn, and eczema	Smallpox
Specific Infection	ACUTE infection of known cause not covered in other syndrome groups, usually has more generalized symptoms (i.e., not just respiratory or gastrointestinal) INCLUDES septicemia from known bacteria INCLUDES other febrile illnesses such as scarlet fever	Not applicable

## Syndrome Definitions for Diseases Associated with Critical Bioterrorism-associated Agents (continued from previous page)

Syndrome	Definition	Category A Condition
Fever	ACUTE potentially febrile illness of origin not specified INCLUDES fever and septicemia not otherwise specified INCLUDES unspecified viral illness even though unknown if fever is present	Not applicable
	EXCLUDE entry in this syndrome category if more specific diagnostic code is present allowing same patient visit to be categorized as respiratory, neurological or gastrointestinal illness syndrome	
Severe Illness or Death potentially due to infectious disease	ACUTE onset of shock or coma from potentially infectious causes EXCLUDES shock from trauma INCLUDES SUDDEN death, death in emergency room, intrauterine deaths, fetal death, spontaneous abortion, and still births EXCLUDES induced fetal abortions, deaths of	Not applicable
	unknown cause, and unattended deaths	